## IN THE CLAIMS:

Claim 1 has been amended as follows:

- 1. (Currently Amended) A multi-electrode catheter comprising:
- a longitudinally extending body adapted for insertion in a subject, said body having a caudal section and a cephalad section and a plurality of lumens formed therein proceeding between said caudal section and said cephalad section, each of said lumens having an internal wall, said caudal section having an external surface and said body having a body portion disposed between said internal wall and said external surface;
- a plurality of electrode assemblies respectively including a plurality of electrodes located at an said external surface of the caudal section of the body; and
- at least some of said lumens having an electrically conductive surface formed on the internal wall thereof respectively electrically connected to different ones of said electrodes; and
- a plurality of electrical connections proceeding through said body

  portion and respectively electrically connecting the electrically

  conductive surface of at least some of said lumens to different

  ones of said electrodes.

Please add the following new claims:

2. (New) A multi-electrode catheter as claimed in claim 1, wherein at least one of said electrical connections comprises a through-hole in said body portion internally plated with electrically conductive material.

- 3. (New) A multi-electrode catheter as claimed in claim 1 wherein at least one of said electrical connections comprises a solid plug comprised of electrically conductive material proceeding through an opening in said body portion.
- 4. (New) A multi-electrode catheter as claimed in claim 1 wherein at least one of said electrode assemblies is an electrode dot.
- 5. (New) A multi-electrode catheter as claimed in claim 1 wherein at least one of said electrode assemblies is an electrode ring.